

POLYGLYCOL

REVISION OF: 08/21/86

MCDONNELL DOUGLAS AIRCRAFT

ORDER NO: 560W48558

2900 E. COVER RD.
LONG BEACH CA 90846

MCKESSON CHEMICAL COMPANY ONE POST STREET SAN FRANCISCO, CA 94104

-----EMERGENCY ASSISTANCE-----

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL CHEMTREC
(800) 424-9300.

-----FOR PRODUCT AND SALES INFORMATION-----

CONTACT YOUR LOCAL MCKESSON CHEMICAL COMPANY SERVICE CENTER

-----PRODUCT IDENTIFICATION-----

PRODUCT NAME: POLYGLYCOL E-4500
COMMON NAMES/SYNONYMS:
POLYETHYLENE GLYCOL; PEGCAS NO.: 25322-68-3
MCKESSON CODE: T1094010FORMULA: POLYMER
HAZARD RATING (NFPA 704)
HEALTH: 0
FIRE: 1
REACTIVITY: 0
SPECIAL: NONEDATE ISSUED: 06/86
SUPERCEDES: 03/86
HAZARD RATING SCALE:
0=MINIMAL 3=SERIOUS
1=SLIGHT 4=SEVERE
2=MODERATE

-----HAZARDOUS INGREDIENTS-----

EXPOSURE LIMITS, MG/M3

COMPONENT	%	PEL	TLV	OTHER	HAZARD
POLYETHYLENE GLYCOL	>99	NONE	10	NONE	ACGIH LIST

-----PHYSICAL PROPERTIES-----

2550
1250

POLYGLYCOL

REVISION OF: 08/21/86

BOILING POINT, DEG F: DECOMPOSES VAPOR PRESSURE, MM HG/20 DEG C: LOW
MELTING POINT, DEG F: N/A VAPOR DENSITY (AIR=1): N/A
SPECIFIC GRAVITY (WATER=1): 1.2 WATER SOLUBILITY, %: 100
APPEARANCE AND ODOR: EVAPORATION RATE (BUTYL ACETATE=1): N/A
COLORLESS BLAND SOLID

-----FIRST AID MEASURES-----

IF INHALED: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 15 MINUTES, LIFTING THE UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF SKIN CONTACT: WASH OFF IN FLOWING WATER OR SHOWER.

IF SWALLOWED: IF LARGE AMOUNTS INGESTED, IMMEDIATELY INDUCE VOMITING BY GIVING 2 GLASSES OF WATER AND STICKING A FINGER DOWN THE THROAT. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

-----HEALTH HAZARD INFORMATION-----

PRIMARY ROUTES OF EXPOSURE: SKIN OR EYE CONTACT

SIGNS AND SYMPTOMS OF EXPOSURE

INHALATION: INHALATION OF DUSTS MAY CAUSE IRRITATION OF UPPER RESPIRATORY TRACT.

EYE CONTACT: DUSTS MAY IRRITATE THE EYES.

SKIN CONTACT: PROLONGED OR REPEATED EXPOSURE NOT LIKELY TO CAUSE IRRITATION. MAY CAUSE IRRITATION IF SKIN IS CUT OR SCRATCHED. MATERIAL MAY BE ABSORBED THROUGH DAMAGED SKIN. SINCE THIS PRODUCT IS SOMETIMES USED AT HIGH TEMPERATURES, MORE INTENSE EFFECTS AS WELL AS THERMAL BURNS ARE POSSIBLE.

SWALLOWED: SINGLE DOSE TOXICITY IS VERY LOW.

CHRONIC EFFECTS OF EXPOSURE: PROLONGED OR REPEATED OVEREXPOSURE MAY

POLYGLYCOL

REVISION OF: 08/21/86

RESULT IN DELAYED KIDNEY DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: MAY CAUSE ADVERSE EFFECTS IN INDIVIDUALS WITH IMPAIRED RENAL FUNCTION. TOPICAL APPLICATIONS CONTAINING PEG MAY NOT BE APPROPRIATE IN SEVERELY BURNED PATIENTS OR IN PERSONS WITH IMPAIRED RENAL FUNCTION.

-----TOXICITY DATA-----

ORAL: RAT LD50 > 30 G/KG

DERMAL: RABBIT 500 MG/24 HR (MODERATE IRRITATION)

INHALATION: NO DATA FOUND.

CARCINOGENICITY: THIS MATERIAL IS NOT CONSIDERED TO BE A CARCINOGEN BY THE NATIONAL TOXICOLOGY PROGRAM, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, OR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OTHER DATA: POLYETHYLENE GLYCOLS DID NOT CAUSE CANCER IN LONG-TERM ANIMAL STUDIES.

-----PERSONAL PROTECTION-----

VENTILATION: GENERAL ROOM VENTILATION.

RESPIRATORY PROTECTION: IF USE CONDITIONS GENERATE DUSTS, WEAR A NIOSH-APPROVED RESPIRATOR APPROPRIATE FOR THOSE EMISSION LEVELS. APPROPRIATE RESPIRATORS MAY BE A FULL FACEPIECE OR A HALF MASK AIR-PURIFYING CARTRIDGE RESPIRATOR WITH PARTICULATE FILTERS, A SELF-CONTAINED BREATHING APPARATUS IN THE PRESSURE DEMAND MODE, OR A SUPPLIED-AIR RESPIRATOR.

EYE PROTECTION: SAFETY GLASSES WITH SIDE SHIELDS. IT IS GENERALLY RECOGNIZED THAT CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH CHEMICALS BECAUSE CONTACT LENSES MAY CONTRIBUTE TO THE SEVERITY OF AN EYE INJURY.

PROTECTIVE CLOTHING: LONG-SLEEVED SHIRT, TROUSERS, AND SAFETY SHOES.

OTHER PROTECTIVE MEASURES: AN EYEWASH AND SAFETY SHOWER SHOULD BE NEARBY AND READY FOR USE.

POLYGLYCOL

REVISION OF: 08/21/86

-----FIRE AND EXPLOSION INFORMATION-----

FLASH POINT, DEG F: 500

FLAMMABLE LIMITS IN AIR, %

METHOD USED: PMCC

LOWER: UNK UPPER: UNK

EXTINGUISHING MEDIA: USE WATER SPRAY, DRY CHEMICAL, OR ALCOHOL FOAM.

SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE WATER SPRAY TO COOL NEARBY CONTAINERS AND STRUCTURES EXPOSED TO FIRE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE.

-----HAZARDOUS REACTIVITY-----

STABILITY: STABLE

POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: PRODUCT DEGRADES SLOWLY WHEN STORED AT ELEVATED TEMPERATURES IN THE PRESENCE OF AIR.

MATERIALS TO AVOID: ACIDS, OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY LIBERATE CARBON MONOXIDE OR CARBON DIOXIDE.

-----SPILL, LEAK, AND DISPOSAL PROCEDURES-----

ACTION TO TAKE FOR SPILLS OR LEAKS: WEAR PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON, AND A FULL FACEPIECE OR A HALF MASK AIR-PURIFYING CARTRIDGE RESPIRATOR WITH PARTICULATE FILTERS. WEAR CHEMICAL GOGGLES IF A HALF MASK IS WORN. FOR SMALL SPILLS, SWEEP UP AND DISPOSE OF IN DOT-APPROVED WASTE CONTAINERS. FOR LARGE SPILLS, SHOVEL INTO DOT-APPROVED WASTE CONTAINERS. KEEP OUT OF SEWERS, STORM DRAINS, SURFACE WATERS, AND SOIL. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING, AND HANDLING AND DISPOSAL OF WASTE.

DISPOSAL METHODS: DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES.

NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

POLYGLYCOL

REVISION OF: 08/21/86

-----SPECIAL PRECAUTIONS-----

STORAGE AND HANDLING PRECAUTIONS: STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. DO NOT USE PRESSURE TO EMPTY CONTAINER. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.

REPAIR AND MAINTENANCE PRECAUTIONS: DO NOT CUT, GRIND, WELD, OR DRILL ON OR NEAR THIS CONTAINER.

OTHER PRECAUTIONS: CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL.

-----FOR ADDITIONAL INFORMATION-----

CONTACT DOUGLAS EISNER, TECHNICAL DIRECTOR, MCKESSON CHEMICAL COMPANY
DURING BUSINESS HOURS, PACIFIC TIME (415)983-9214

-----NOTICE-----

ALL INFORMATION, RECOMMENDATIONS, AND SUGGESTIONS APPEARING HEREIN CONCERNING THIS PRODUCT ARE BASED UPON DATA OBTAINED FROM THE MANUFACTURER AND/OR RECOGNIZED TECHNICAL SOURCES; HOWEVER, MCKESSON CHEMICAL COMPANY ("MCC") MAKES NO WARRANTY, REPRESENTATION OR GUARANTY AS TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE MATERIAL SET FORTH HEREIN. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SAFETY, TOXICITY AND SUITABILITY OF HIS OWN USE, HANDLING AND DISPOSAL OF THE PRODUCT. ADDITIONAL PRODUCT LITERATURE MAY BE AVAILABLE UPON REQUEST. SINCE ACTUAL USE BY OTHERS IS BEYOND OUR CONTROL, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE BY MCC AS TO THE EFFECTS OF SUCH USE, THE RESULTS TO BE OBTAINED OR THE SAFETY AND TOXICITY OF THE PRODUCT, NOR DOES MCC ASSUME ANY LIABILITY ARISING OUT OF USE BY OTHERS OF THE PRODUCT REFERRED TO HEREIN. THE DATA IN THIS MSDS RELATE ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DO NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS.

-----REVISION-----

06/86: ADDED CAS NUMBER, DERMAL TOXICITY DATA, AND PERSONNEL EXPOSURE LIMIT. EXPANDED RESPIRATORY AND EYE PROTECTION AND FIRE FIGHTERS CLOTHING. EXPANDED SPILL/LEAK PROCEDURES AND HANDLING RECOMMENDATIONS.

END OF MSDS
